tralac

South African agriculture protection: how much policy space is there?

by

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Summary and key points

The object of this paper is to assess the amount of 'policy space' available to increase the tariff protection to South African agriculture. We have used the World Trade Organisation (WTO) definitions for agricultural products, and sourced import data (expressed in US dollars) from the World Trade Atlas, applied tariff data from the Southern African Customs Union (SACU) Tariff Schedule and South African bound tariff rates and tariff quota information from the WTO website.

We have concluded that in general the policy space available to South African agriculture is limited because:

- Some 14.1 percent of the imports are 'locked' by the WTO bound rates, with another 7.5 percent almost at those bound rates.

- Another 22.9 percent is effectively 'locked' as at least 50 percent is sourced from the European Union (EU)/ Southern African Development Community (SADC), and this can be combined with an additional 15.2 percent 'almost locked' with at least 40 percent of the imports from these same destinations.

- This gives a total of 59.7 percent that is, for all practical purposes, locked into the current tariff policy regime.

- **Of the remaining imports**
  (i) we have classified 14.6 percent as animal feed inputs, thereby raising the caution flag that increasing these tariffs will directly pass a cost increase onto poultry and meat producers;
  (ii) we have isolated the imports of wheat (6.7% of the total) and argued that while there is policy space to increase there tariff rates we consider that they are staple foodstuffs; and
  (iii) this leaves a grand total of 19.0 percent of all imports where we see at least some policy space, but caution that the majority of imports in this category are subject to WTO tariff rate quotas (TRQ) obligations and thus not totally under the control of South African trade policy authorities.

Summary of the policy space available

No policy space, as applied rates are at bounds ($378.2m, 14.1 %of total imports)					
Rice	$230.0m	Oth animal prod	$46.5m	Coffee	$37.7m
Very limited space, as EU/SADC imports combined > 50% ($611.8m, 22.9% total)					
Spirits, etc.	$185.8m	Processed food	$129.3m	Cotton	$69.0m
Limited space, as EU/SADC imports still > 40% ($406.3m, 15.2% total)					
Tobacco	$77.7m	Animal feeds	$67.3m	Fats/oils	$61.4m
Very limited space, as applied rates are close to bounds ($200.8m, 7.5% total)					
Casein	$111.0m	Cocoa/choc	$69.6m	Spices	$20.2m
Policy space, but a major animal feedstuff ($391.4m, 14.6% total)					
Palm oil	$128.6m	Soybean cake	$118.7m	Soybean oil	$110.0m
Policy space but a staple food ($180.6m, 6.7% total)					
Wheat	$180.6m				
Yes, there is clear policy space ($507.5m, 19.0% total)					
Poultry	$147.2m	Sugar products	$69.2m	Pork	$47.3m

Source: tralac calculations

1.   Introduction and preamble

Supports to South African agriculture were stripped from the sector from 1994/95 to the end of the 1990s, and these domestic reforms were accompanied by the liberalisation of trade policies as border tariffs were reduced and export subsidies were eliminated under unilateral reductions that went beyond any mandatory requirements imposed by the World Trade Organisation through the Uruguay Round outcome. This was however somewhat balanced by the introduction of tariff rate quota regimes for several products[1] and a system of (largely now ended) variable import tariffs. Roughly a decade after this considerable liberalisation, South African agriculture is at somewhat of a crossroads. There is a body of opinion arguing that this liberalisation has not helped the sector and therefore a reversion to protectionism is required. The objective of this research is to clinically analyse the individual agricultural imports by sector to assess as to how practical in terms of policy space this option may be given the current levels of commitments to multilateral trading partners through the WTO and bilaterally through commitments such as the Trade and Development Cooperation Agreement (TDCA) with the EU and preferences granted to SADC.

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[1] Note that most of these TRQ rates are set at 20% of the WTO bound rates, and in general appear not to act as a major constraint to imports in these products.

At the outset we must stress that the objective of examining available 'policy space' as defined as the ability to increase import tariffs will be adhered to. We appreciate that support to agriculture may or may not be able to be increased through more direct domestic support to the sector that may or may not contravene WTO rules. This paper does not examine those possibilities. Nor does it explore supply constraints facing the sector other than those such as land or water constraints or marketing issues such as Sanitary and Phytosanitary Measures (SPS) constraints.

Sandrey and Jensen (2007) provided a background to the WTO and the impact that this institution may have in constraining the South African policy space. That background, and the detailed results from the Global Trade Analysis Project (GTAP) model simulations, will not be repeated here in any detail other than the brief summary below and a more detailed review in Section 4 later in the paper. The reader is referred to the Sandrey and Jensen (2006) for the full discussion, as they ran and reported on two simulations from GTAP: the **first** to simulate an outcome for the current WTO Doha Development Agenda (DDA) with an emphasis on the agricultural results, both globally and for the region; the **second** to simulate the impacts upon South Africa in general and the agricultural sector in particular from increasing all South African (SACU) applied agricultural tariffs by 25 percentage points in an arbitrary manner. Results from this second simulation in particular provide not only for a general picture of the overall impacts and the impacts by broad agricultural sectors, but just as importantly allows an initial assessment of how such an increase in agricultural tariffs may run into constraints and problems created by South Africa's commitments to the WTO, such as bound tariffs and tariff rate quotas (TRQs) on one hand and Free Trade Agreement (FTA) partner preferences on the other hand. These GTAP results and subsequent analysis provide background for the current paper that leads into a detailed product by product examination to provide more in-depth information on the policy space available for agriculture. This current paper, in effect, moves on to look in more detail from where Sandrey and Jensen (2007) left off.

1.1   The likely Doha outcome

The global welfare gains from Doha are estimated to be some $47.5 billion, with a lesser $2.5 billion of this from agricultural reform and the greater $45 billion from the liberalisation of markets for non-agricultural goods[2]. South Africa gains nearly one percent of the total gains

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[2] This large disparity between gains from the liberalisation of trade in agriculture and non-agricultural goods (NAMA) results not because agriculture is less protected, as, on the contrary, it is more

($318 million), with $42 million of this from agricultural reform and the remainder from non-agricultural reforms. The big gainers are China, Japan, EU and our 'Rest of the World', while the US loses. Botswana loses by some $9 million, while the 'rest of SACU' aggregation of Lesotho, Namibia and Swaziland gains by $13 million[3]. These results are consistent with a literature review of recent analysis, and reinforce that the shielding of some sensitive and special products considerably reduces the global gains from agricultural liberalisation (Sandrey and Jensen, 2007).

By product, the gainers in South Africa are the wheat, beef and sheep meat, and dairy products sectors where output and consequently exports increase. Production and trade in the sugar sector declines marginally as South Africa largely chose to utilise its protective flexibility in this sector. Beef exports to the EU and 'Rest of the World' and wheat to Japan are the big export gainers. There is a slight increase in imports, with most of this coming as more wheat.

1.2   Increasing South African agricultural tariffs

This was also undertaken by Sandrey and Jensen (2007) as a separate exercise raising all tariffs by a uniform 25 percentage points from the original base that did not consider a Doha Round outcome. Overall, the welfare results were positive for South Africa to the extent of an increase of $47.5 million at 2015 despite a reduction in allocative efficiency in the South African economy. Botswana lost out, but the other SACU aggregation benefited by $26.7 million. Most productive activities increased, while trade flows of both exports and imports declined as more domestic production was used locally. On the face of it, this move is good for South Africa and South African agriculture.

The problem with this analysis arose when the 'policy space' available to make these changes was considered. Here the combination of breached WTO bound tariffs, the lower and similarly bound WTO in-quota tariff rates and bilateral tariff preferences negotiated with the EU and non-SACU SADC members meant that there was almost no 'policy space' available to make these changes in the broad GTAP agricultural sectors except in wheat, possibly other grains (maize), and vegetable oil seeds (an import that is used as a feedstuffs in the domestic chicken sector). In general, it appeared that this limited policy space available would restrict South Africa's abilities to unilaterally raise border protection for the

protected. Rather it comes about because (1) much of the agricultural protection remains under a modest Doha outcome and (2) NAMA trade dominates agricultural trade by global value.
[3] The implications for Botswana and the other SACU members of Lesotho, Namibia and Swaziland (BLNS) are not comprehensively discussed in this paper.

agricultural sector. A fuller discussion of this modelling scenario and the implications for policy space is presented later in the paper, and this current paper can be viewed as one that starts from where the GTAP modelling scenario leaves off.

2.   South African agricultural trade policy

While it is a useful exercise to simulate the increase of South African agricultural tariffs to ascertain some indication of overall welfare results, there are institutions and agreements in place that mean it would be difficult for South Africa to actually do this. One such multilateral institution is the WTO, where South Africa has pledged (a) bound tariff rates that it will not exceed and (b) tariff rate quota (TRQ) access for preferential import duties. On the first issue of bound tariffs, these are to some extent an artefact of the arcane world of trade negotiators, as in most cases they are above the actual at-the-border applied rates for South Africa (a phenomenon known to trade economists as 'water in the tariff', as a WTO agreed cut in bound rates may not make any practical difference at the border). There is a linkage between these bound rates and the TRQs, as South Africa has bound (i.e., promised not to increase) its TRQ rates of 20 percent of the bound rates.

Sandrey and Vink (2006) outline South Africa's recent agricultural policy reforms, and conclude that these reforms, including the tariff reforms, went beyond what was mandated by the Uruguay Round agreement of the new WTO. During the 1990s South Africa fast-tracked the liberalisation of its (and SACU's) tariff schedule; from 1990 to 1999 the maximum rate fell from 1,389 per cent to 55 per cent, while the average (unweighted) rate fell from 27.5 percent to 7.1 per cent over the same time. Within this band, agricultural tariffs became a lesser 4.6 per cent unweighted and an even more insignificant 1.9 percent weighted, although a number of tariff peaks do remain. Importantly, the actual applied Most Favoured Nation (MFN) current rates are significantly below the WTO bound rates in most instances.

In addition, South Africa has negotiated two major preferential access agreements (with others 'in the pipeline'). The most important one, given that around one-quarter of the agricultural imports are sourced from the EU, is the TDCA, while the duty-free access granted to other SADC members also becomes important within the context of available policy space for the sector.

2.1 Tariff rate quotas (TRQ)

These are also mandated through an agreement with the WTO, where a TRQ is a two-level tariff applied on imports of a particular product. A quota limit for imports is set, and for imports below this amount, a lower in-quota tariff is charged. For all imports above this amount (over the quota limit), a higher over-quota tariff rate of the MFN rate is charged. Therefore the possible effect of a TRQ depends on the demand for imports. Where import demand is below the quota volume, the in-quota tariff acts as the non-binding instrument. But where strong import demand raises imports above the quota, the quota then becomes a binding instrument and imports above this quota volume enter at a higher MFN tariff rate. South Africa has bound the in-quota tariff rate at a level that is 20 percent of the WTO normal bound rate, but in some instances this in-quota rate is still below the actual applied rate, thus making the TRQ redundant.

Should South Africa wish to increase these TRQ rates, GATT Article XXVIII modification of schedules comes into play. Importantly, Paragraph 2 talks about the provision of compensation, and this would have to be negotiated with interested parties, some of whom may prove to be very litigious[4]. With the number of tariff quotas that South Africa has, there would be a lot of WTO interest in this move, and we shall explore the potential restrictions for policy space a move to increase rates may actually have.

An analysis of the WTO Schedules shows that South Africa had 53 nominated TRQs, and by 2005 some 43.6 percent of South Africa's agricultural imports (by value) are potentially administered by these TRQs. Only through a product by product examination of the relationships between the WTO bound rates, TRQ rates set at 20 percent of this bound rate, the actual MFN applied rates and the likely effects of preferential FTA rates (TDCA and SADC) can an appreciation of the actual 'policy space' be assessed.

Finally, South Africa does not actually have a tariff policy, therefore it should not, in theory, unilaterally increase its applied tariff rates. Under the new SACU Agreement of 2002 (Article 11), a Tariff Board drawn from member states shall make recommendations on tariff rates and advise the SACU Council of these recommendations. Also, under Article 39 member states have agreed to cooperate on agricultural policies in order to ensure the coordinated development of the agricultural sector.

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[4] Thus, the TRQ rate can be increased in tandem with the MFN applied rate as long as the MFN applied rate does not exceed the bound, but the 20 percent figure cannot be unilaterally increased without negotiation and possible compensation.

3.   Current South African agricultural imports and associated tariffs

3.1   South African agricultural imports

During 2005 South Africa imported agricultural goods as defined by the WTO to the value of some $2,627 million[5], a figure very marginally down from the previous year and up from US$ 1.2 billion during 1996. This data, along with the percentage share of agricultural imports in South Africa's total imports, is shown in Figure 1. Imports in $ million are shown in columns on the left hand scale with the percentage share as a line related to the scale on the right hand side. In dollar value terms these imports were relatively stable from 1996 to 2001 before jumping to a newer and also stable level from 2002 to 2005. In terms of percentage of the total imports, a different pattern can be seen; the agricultural imports declined through to 2001 before increasing and then reverting to the 2001 level again during 2005. Importantly there does not seem to be an increase from the 1996 period once the deregulation effects could have become more pronounced.

Figure 1: Agricultural imports, US $ million and % of total imports
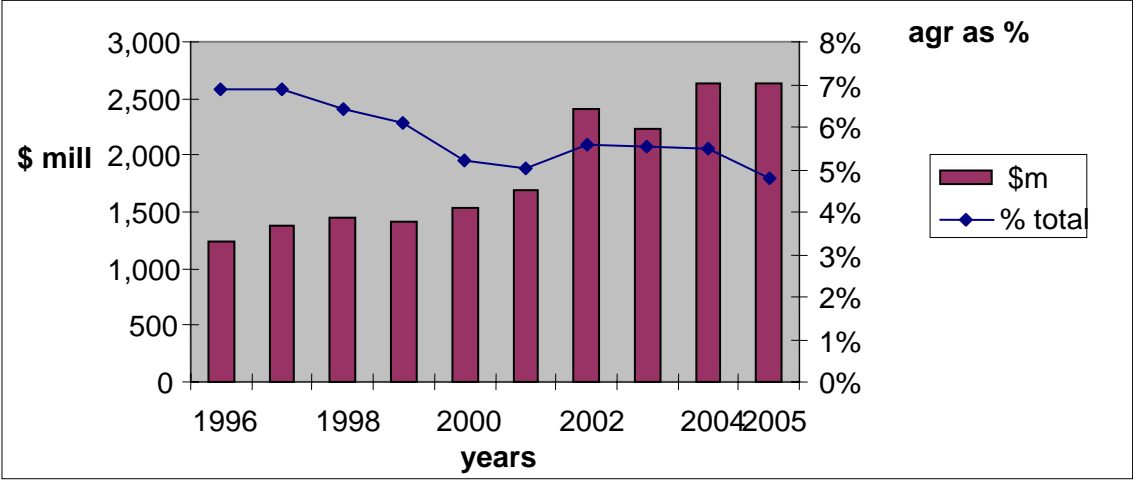
Source: World trade Atlas

At the detailed HS 6 line[6] level, the main imports during 2005 were rice, wheat, whiskies, soybean oilcake, chicken cuts and palm oils. These imports are shown in Table 1 **(note that**

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[5] At the average trade-weighted exchange rate during 2005 of 6.37 rand to the US dollar this equated to some R17 billion.
[6] Where HS is the internationally accepted Harmonised System of trade classification that uses a hierarchical classification from say HS 02, meat, to HS 0202, frozen beef, to HS 020230, boneless beef, for example. Classifications are theoretically comparable to the HS 6 (HS 020230 above), while countries can and often do make further classifications to HS 8 and even HS 9 or 10 levels of details. The associated tariff lines are sometimes allocated down to these detailed levels of classification. Note that in some countries it is the practice to manipulate the detailed tariffs in these HS codes purely

values are in rand), with an historical perspective from 1996 to 2005 presented to place the imports in context.

Table 1: Main agricultural imports at detailed level, rand million

HS 6	Description	1996	1998	2000	2002	2004	2005
All agriculture		7,837	9,231	9,797	15,371	16,770	16,730
100630	Rice	596	808	900	1,213	1,303	1,408
100190	Wheat	643	421	563	869	1,249	1,122
220830	Whiskies	319	393	367	577	730	897
230400	Soybean oilcake	287	357	470	946	1,061	756
021714	Chicken cuts	101	207	209	257	496	726
151190	Palm oil	219	374	321	754	789	662
210690	Prepared food	138	232	326	452	452	576
150790	Soybean oil	3	0	0.7	55	437	506
520100	Cotton	270	423	220	625	743	424
240120	Tobacco	91	179	144	472	661	390
170490	Sugar confectn	26	59	65	65	281	289

Source: World Trade Atlas

The top two imports of rice and wheat have been consistent in claiming their positions on the table over the period. The next line, whiskies, and both cotton and tobacco further down the list, while defined as agricultural products, are in somewhat of a different classification than the other imports shown in that while they are both agricultural products they are not food items. Cotton in particular is an input into textile production. The dramatic growth has been in chicken cuts, soybean oil and to a lesser extent sugar confectionary. Note also that both soybean oilcakes and soybean oil are animal feeds and as such are inputs into a major component of South African agriculture. This general variety of imports serves to illustrate that increasing the protection for the sector may not necessarily provide neat, tidy and simple answers to the questions relating to overall impacts through the economy or even the agricultural sector itself.

The next question is to gain some indication of the sources of these imports and their respective protection rates both in general and specifically, given the preferential access

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in order to preserve protection in specific sensitive lines while still maintaining an overall average within the WTO constraints. We would hope that South Africa would not resort to such duplicity.

granted to both the EU through TDCA and non-SACU SADC members[7]. This information is given in Table 2, with the data presented for (a) the more aggregated HS 4 level and (b) for the 2005 imports. The duty, however, has been assessed on the early 2006 rates, as the SACU tariff schedule is a 'live' document and the TDCA year six preferences were used to be consistent with that source. A degree of product matching can be done between Tables 1 and 2, although Table 1 is at the detailed HS 6 level while Table 2 is at a more aggregated and therefore general level.

Table 2: Agricultural imports by source, 2005 Rm, % share, duty % and product lines

Source	Imp Rm	% share	Av duty %	main	second	third
All	**2,627**	**100**	**8.46%**	**wheat**	**rice**	**chicken**
EU	651	24.34	8.42%	ethyl alcohol	food preps	drink flavour
Mercosur	649	24.25	12.65%	chicken	soy oilcake	soy oil
SADC	167	6.25	0.0%	cotton	tobacco	tea
USA	219	8.18	4.88%	wheat	ethyl alcoh	food preps
China	93	3.49	7.09%	animal guts	dried peas	fruit juice
India	110	4.11	2.93%	rice	veg extract	tobacco
Japan	1.6	0.06	4.70%	seed, etc	drink flavour	food preps
Middle East	43	1.59	11.99%	bread, etc	nuts etc	preserve fruit
Rest world	742	27.73	8.58%	rice	palm oil	wheat

Source: World Trade Atlas and tralac calculations

Table 2 highlights that:

1.   one quarter of the agricultural imports are from the EU, and the implications of the TDCA will be explored in detail later. We would, however, point out that some 25 percent of the agricultural imports from the EU by value would have entered duty-free at the 2006 rates, and by the TDCA end point of around 2000-2012 this percentage increases dramatically to 81 percent.;

2.   a second quarter are from Mercosur (Argentina, Brazil, Uruguay and Paraguay), and there is a (limited) trade agreement between SACU and Mercosur. This proposed FTA may well have some constraints on the policy space for South Africa, as it is our

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[7] Note that this data and subsequent analysis flowing from it does not include imports from the fellow SACU members Botswana, Lesotho. Namibia and Swaziland (BLNS), as (a) their data is not included in this source and (b) they have duty-free access as of right. Implications of the agricultural policy changes for the BLNS will be addressed separately.

understanding that while negotiations have more or less concluded there has not been an official signing and therefore implementation of the agreement[8];

3. some 6.25 percent of the imports were from SADC, and these imports are granted duty-free status;

4. the US, China and Japan are all relatively important sources;

5. the rest of the world accounts for another significant 27.73 percent. Not shown is that this source is important for the three main imports of wheat (Australia), rice (Thailand) and palm oil (Malaysia and Indonesia); and

6. the average import duties range from a high of Mercosur at 12.65 percent to SADC's zero. Recall that only the EU and SADC currently have preferences.

3.2   Growth rates of imports

An examination of the HS 6 import lines where (a) the value of imports during 2005 was **at least $16 million** and (b) the average **annual growth rate** (expressed in log form since 1996 was) **at least 10 percent** revealed that there were 17 lines in this category. In aggregate, these lines accounted for 38 percent of the agricultural imports by value during 2005, a figure only modestly up from the value of 34 percent of the imports during 2001 but above the 20 percent in the base year of 1996. Note that the average increase in agricultural imports over the same period has been 15.5 percent, a figure three percentage points above the global average of South African imports of 12.5 percent. This suggests that while the increase in agricultural imports is higher than that of global imports of all products into South Africa since the liberalisation of the agricultural policies, it is not significantly higher. These most significant agricultural import lines are shown below in Table 3.

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[8] Similarly, the agreement between SACU and European Free Trade Association (EFTA) has been concluded, but agricultural imports from EFTA into South Africa are minimal. We must also comment further on the SACU/Mercosur agreement, and we agree with Stern and Flatters (2005) who are particularly scathing on this agreement. They write that Mercosur conceded improved access into South Africa for 46 of their currently traded product lines, and that South Africa's imports of these products from Brazil and Argentina in 2004, 'was a miserly R26m'. Overall, they considered that it would be hard to construct a less meaningful agreement. The limited nature of this agreement and the possible implications for agriculture are discussed in Section 6. Available on http://qed.econ.queensu.ca/faculty/flatters/writings/geekonomics_1.pdf.

Table 3: Fastest growing imports, $m and annual % growth 2005 over 1996

HS code	description	Imports 1996 $m	Imports 2005 $m	Growth %
220830	Whiskies	74	141	11.5
230400	Soybean cake	67	119	10.8
020714	Chicken cuts	23	114	21.9
151190	Palm oil	51	104	12.3
210690	Food preparations	32	90	15.9
150790	Soybean oil	1	79	57.4
240120	Tobacco	21	61	16.2
170490	Sugar confectionary	6	45	26.7
020329	Pork	16	44	15.6
230990	Animal feeds	18	32	10.6
150710	Soybean oil	12	31	14.9
220210	Waters	5	25	22.0
090240	Black tea	13	23	10.6
220840	Rum	7	21	17.0
180690	Cocoa preparations	5	21	20.6
100300	Barley	0	19	124.5
020727	Turkey cuts	10	19	10.7

Source: World Trade Atlas, tralac calculations

Secondly, extending this analysis to the next step down (and therefore not shown in the table), there were a further 14 lines with (a) growth rates above 10.0 percent annually and imports during 2005 of **between $8 million and $16 million**. These lines are: another HS 6 detailed line of chicken meat and offal; milk powders, whey and cheese; cashew nuts; cotton and other vegetable seeds; olive oils; raw cane sugar; bread; apple juice; coffee extracts; and fine animal hair.

Thirdly, for the import lines (and there are also 14 lines in this category) that are above $16 million but with **lower growth rates,** there were the two big imports of wheat and rice; frozen beef and lamb; kidney beans; coffee not roasted; malt (a decline of 2.0%); sunflower seeds (a decline of 10.2%); palm kernel; cocoa butter; sugar-based soft drink flavours; peptones and other proteins; and cotton not carded.

4.   The GTAP analysis: increasing South African agricultural tariffs by 25 percentage points

This simulation was undertaken as part of the analysis of the implications for South Africa of reverting to more border protection for its agricultural sector, all other factors held constant. The main objective is to use the GTAP model to simulate such a broad-based approach to

show the aggregate welfare results[9], and then examine both the underlying assumption and the model results to place such a move in a policy space perspective regarding South African (and SACU's) commitments through agreements such as the multilateral WTO and the bilateral TDCA and SADC preferences. Intra-SACU trade is of course held at free entry, but all other tariffs are increased regardless of international and bilateral commitments.

4.1   The results: increasing South African agricultural tariffs

Table 4 shows the GTAP welfare results from this simulation. South African welfare increases by $45.4 million, and welfare similarly increases in XSC (rest of SACU), the US, India, China and the rest of the world. Welfare declines in Botswana, rest of Africa (RAF), the EU and Brazil. The losses to the EU and RAF probably result from arbitrarily denying these regions some of the preferential agricultural access into South Africa that they otherwise would have had; the EU with partial preferences under TDCA and presumably the dominant non-SACU SADC component of RAF with its effectively duty-free access. Note that Brazil loses as a result of facing increased tariffs into South Africa, and we would suggest that these imports (oil seed animal feeds) are largely inputs into further agricultural production in South Africa. Globally, the gains from more efficient capital usage are negated by deteriorating allocative efficiency but with little change to labour and terms of trade overall, with all of this leading to a small overall global welfare reduction of $10 million.

In decomposing the contributions to South Africa's welfare gains we see that there is a big allocative efficiency loss as resources are transferred into the now-protected sectors and this relies on an equally large terms of trade gain to compensate, while employment's contribution increases as more labour is used. Most of the XSC gains are from terms of trade as South African prices increase, while Botswana loses across the table.

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[9] The interpretation of results from a model is not straightforward. In the standard type of computer general equilibrium (CGE) such as the GTAP model these results are expressed as welfare measures that show how much better/worse off a country/region and the world would be as a result of the particular change. Usually these results are expressed in a manner that takes account of net income transfers globally to take into account the costs of servicing capital transfers, but not always. There is no indication of the time-path of the welfare gains in a static model, so a welfare gain of $10 million to South Africa means that South Africa is $10 million better off at the final year than it otherwise would have been in the absence of that change. There is also little said about the distributional aspects of these gains as there is only one 'representative household' in GTAP, and there are no guarantees that these gains will continue (although they are likely to, but with diminishing returns).

Table 4: Welfare results from South Africa unilaterally raising agricultural tariffs

EV $m	Total	Allocative efficiency	unskilled labour	Capital Accum.	Terms of trade
South Africa	45.4	-118	18	32.0	113
Botswana	-15.1	-6	-1	-6.0	-2
XSC (Lesotho, Namib, Swaz)	27.2	-7	4	5.8	25
Nigeria	1.5	0	0	0.3	1
Rest of Africa	-56.7	-19	-4	-6.0	-27
EU-27	-81.2	-35	-1	11.4	-57
USA	32.0	10	0	38.8	-17
India	2.4	2	0	5.0	-4
China	11.5	3	0	10.8	-2
Brazil	-4.7	0	0	0.2	-4
Japan	5.0	9	0	11.2	-15
Rest of world	22.9	1	-1	34.3	-12
Total	**-10.0**	**-162.0**	**14.7**	**137.7**	**-0.3**

Source: GTAP results

Table 5 shows that domestically the big gainers are owners of land in South Africa where prices increase by around 6.2 percent, and, more dramatically, in the rest of SACU where they increase by a large 14.5 percent. Both skilled and unskilled labour gain (through increased wages) in South Africa and rest of SACU, although not in Botswana.

Table 5: Real price changes in factors of production, % change

Factors	South Africa	Botswana	Lesotho Namibia Swaziland
Land	6.18	4.3	14.53
Unskilled labour	0.14	-0.14	0.32
Skilled labour	0.15	-0.19	0.39
Capital	0.09	0	0.16
Natural resources	0.16	-0.35	1.84

Source: GTAP results

Other changes worth reporting from the model results are:

Trade balance

- There is an overall positive increase of $67.8 million in South Africa's trade balance

- Little changes to Botswana's ($0.32m) or rest SACU ($-0.51)

- But a decline in RAF's of $3.1 million and the EU's of $11.6 million.

CPI (the inflation rate)

- An increase of 0.71 points for South Africa, 0.56 for Botswana and a large 1.18 for rest of SACU.

There is also an increase in the real exchange rate (aggregate price of non-tradeables to tradeables) relative to the rest of the world in South Africa of 0.24 percent. As always, an increase in this real exchange rate will (marginally) dampen South Africa's abilities to compete globally. Thus, there are some macroeconomic negatives, such as an increased inflation and consequently real exchange rates for South Africa and many distributional considerations, such as the impacts of higher food prices on the poor that need to be considered.

4.2   Changes to production and trade

Table 6 shows where the main changes in output by sector take place for South Africa, Botswana and XSC. Most agricultural sectors report increases. The exceptions for South Africa are the important export sector of vegetables, fruit and nuts; sugar cane and subsequently sugar; and wool. These declines take place because at the margin resources are drawn into other, now more profitable, agricultural sectors. The large changes in Botswana need to be placed in perspective, as they are from very low bases other than the beef, while for XSC most sectors increase output. The very low production increases in red meats and dairy is somewhat surprising, and note also that 'other meats' (mostly chicken) also increase production even in the face of increased feed prices from mostly Brazil. Domestic production of rice increases dramatically as barriers to imports are erected[10]. Not shown is that there are small reductions in almost all manufacturing sectors as resources are drawn into agriculture, but note in this context that skilled labour in particular is fixed and

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[10] Food and Agricultural Organisation (FAO) production data suggests that South Africa grows around 1,400 hectares of rice annually with an average yield of 2.29 tonnes/hectare. This means domestic production of 3,200 tonnes. The World Trade Atlas data shows imports over the preceding four years to 2005 to be around 750,000 tonnes annually. Thus, an increase of 25 percent is still insignificant in contributing to around another 1,000 tonnes at best to domestic needs.

therefore the resource shifts away from manufacturing may be accentuated somewhat (although the shortage of skilled labour in South Africa is a reality).

Table 6: Increases in South African production, percentage change from base

Sector	South Africa	Botswana	Lesotho Namibia Swaziland
paddy rice	15.1	7.0	5.8
Wheat	5.4	36.2	16.8
other grains	1.1	0.1	0.4
vege, fruit nuts	-1.3	-0.4	2.9
oil seeds	3.1	11.4	3.0
sugar cane	-1.2	-0.1	0.8
plant fibres	4.2	7.6	1.7
other crops	4.0	5.1	2.7
live cattle, etc	0.5	0.0	0.3
other agr products	1.3	2.2	3.2
raw milk	0.5	-0.3	1.3
Wool	-2.7	9.7	-3.6
beef mutton	0.1	0.0	0.3
other meats	3.7	0.0	5.9
vege oils	9.8	28.0	3.3
dairy products	0.9	-0.4	3.3
processed rice	25.1	150.8	2.3
Sugar	-1.7	38.9	0.5
other food products	1.9	6.9	2.7
bev tobacco	0.5	-0.2	2.1

Source: GTAP results

Turning to changes in trade flows, Table 7 shows these in percentage terms along with the changes to both production and market prices. These market prices increase by up to three percent for wheat, plant fibres (cotton), other meats (chicken) and vegetable oils, with all sectors showing an increase of at least one percent. It is not surprising that wool, the sector with the lowest price increase, is one of two that actually reduces its production when other farming activities become relatively more profitable, but it is surprising that sugar production similarly declines even as market prices increase. Imports of all agricultural products decline as we would expect, but exports also decline in all agricultural sectors as the home market becomes more profitable. Not shown is that for non-agricultural market access (NAMA)

products in the manufacturing sector almost all production activity declines modestly even in the face of slight price increases, and similarly, all exports and most imports from NAMA goods also decline.

Table 7: Changes in South African production, trade and market prices, %

Sector	Production	Exports	Imports	Market prices
Wheat	5.4	-14.3	-39.2	2.4
other grains	1.1	-2.7	-17.9	1.6
vege fruit nuts	-1.3	-3.2	-12.3	1.2
oil seeds	3.1	-8.3	-17.1	2.3
plant fibres	4.2	-11.1	-7.7	3.0
other crops	4.0	-10.9	-27.7	2.5
live cattle etc	0.5	-1.5	-2.7	1.5
other animal products	1.3	-3.4	-13.4	1.8
Wool	-2.7	-10.1	-51.6	0.9
beef, other red meats	0.1	-9.6	-12.9	2.1
other meats	3.7	-15.2	-47.1	3.1
vegetable oils	9.8	-9.7	-35.6	3.0
dairy products	0.9	-4.6	-34.2	1.2
Rice	25.1	-2.3	-14.9	2.1
Sugar	-1.7	-7.5	-15.0	2.0
other food products	1.9	-3.6	-22.9	1.6
beverage tobacco	0.5	-1.6	-15.9	1.0

Source: GTAP simulation output

What is more striking from Table 7 is the large change in trade flows. Exports decline by up to 15.2 percent (other meats) as these exports are diverted to the now relatively more profitable domestic market as indicated by the market prices increases. However, more significantly, imports decline by even more in all cases as (a) the prices of these imports increase due to the increased tariffs and (b) the combination of increased domestic production in most sectors and lower exports in all sectors displaces these previous imports.

4.3   Policy space implications from the GTAP simulation

Table 8 shows in column two the values of agricultural imports ($m) during 2005 for the GTAP agricultural sectors that contain TRQs, with the percentage of the imports by source to set the scene for the next step of the analysis, that of FTA commitments. The right hand column shows the percentage of the GTAP sector that contains HS 6 lines that are governed by TRQs: for example, dairy imports were $65.8 million and 95 percent of these are governed by TRQs, while 62 percent of imports of beef and sheep meats are governed by TRQs.

Table 8: GTAP agricultural sectors, South African imports, $m and % shares

GTAP sector	All	EU	USA	SADC	MERC	Rest	% TRQ
Veges, fruit, nuts	27.1	8.8%	1.4%	2.6%	2.0%	85.2%	35%
Plant-based fibres	66.6	0.1%	0.0%	99.6%	0.0%	0.3%	100%
Crops nec	100.2	10.9%	1.1%	42.8%	25.2%	20.0%	61%
Beef, mutton goat	51.8	0.2%	0.0%	0.0%	58.8%	41.0%	62%
Meat products nec	129.9	3.0%	0.4%	0.0%	85.7%	10.9%	63%
Dairy products	65.8	53.9%	1.0%	0.0%	12.8%	32.3%	95%
Food products nec	132.6	51.3%	15.8%	0.3%	6.5%	26.1%	21%
Beverages Tobacco	14.0	79.7%	0.5%	3.1%	14.2%	2.5%	5%
Sub total	**587.99**	**22.5%**	**4.0%**	**18.8%**	**31.7%**	**22.9%**	

Source: World Trade Atlas data and tralac analysis

Table 8 also points to the second constraint that will limit South Africa's 'policy space' to increase tariffs. This is the regional agreements, with the TDCA for EU access and effective duty-free access from SADC[11] currently in place and others being mooted. For the simulation exercise these regional agreements were completely ignored and the tariffs were raised by 25 percentage points on all imports regardless of any multinational (WTO) or regional agreements. It is now time to see if South African actually has the 'policy space' to make these increases.

For imports of plant-based fibres (read cotton) of $66 million, almost all is from SADC; while for crops not elsewhere specified some 42 percent (read mostly tobacco) is also from SADC.

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[11] SADC means the non-SACU members of SADC, who have duty-free access for all agricultural imports in South Africa (and, by default, SACU). All of these currently zero tariffs are raised to 25 percent across the board where applicable. Note that SADC trade is the major component of the 'rest of Africa' configuration in the GTAP model, so there is an aggregation problem in the model here.

Similarly, a large percentage of many of the imports shown are from the EU where binding commitments have been made that would require serious negotiation to change. We have shown the imports from both the US and Mercosur (Brazil, Argentina, Uruguay and Paraguay) as there is a possibility of South Africa/SACU discussing trade agreement with these major sources of agricultural imports as well.

We can extend this line of analysis to examine the current duty profile and place this in perspective with the current bound rates to gain an appreciation of where there may or may not be policy space in (a) the WTO sense and (b) the FTA perspective. This is shown in Tables 9 and 10 below. The WTO policy space for duties is shown in Table 9, and this follows from Table 8 above that looks at those GTAP sectors that contain TRQ products. It should be read in conjunction with Table 8. Table 10 later shows the FTA policy space.

Table 9 shows:

- The GTAP sector and 2005 imports in US dollars;
- The MFN rates for these imports with (i) no preferences offered and (ii) the preferences in place at the end of the TDCA period to put the current applied duties in perspective;
- The duty rate for EU imports that will apply at end of TDCA period by GTAP sector;
- The WTO bound rates by GTAP sector; and
- Examining the MFN rate in column three against the WTO bound rates with the 25 percentage points added as in this GTAP simulation scenario enables us to assess if we have breached the WTO bound rates and therefore 'policy space' from the WTO bound commitments. Note that this does not take into account the TRQ in-quota tariff rates which are set at 20 percent of the bound rates. Where an '**XX**' appears along with the 'Yes' in this policy space it means that at least 60 percent of the imports are subject to TRQ rates which are not taken into account otherwise.

Table 9: the WTO policy space for South Africa by GTAP sector

	Import	% duty assessed 2005				Space
	$m	MFN	Pref	EU end	Bound	Yes/No
Wheat	181	1.95	1.95	2.0	70.68	Yes
Other grains	36	0.06	0.05	0.0	28.2	Yes
Vege fruit nuts	78	6.54	5.19	0.0	16.38	No
Oil seeds	20	9.01	3.23	0.0	47.21	Yes **XX**
Plant fibres	67	24.88	0.08	0.0	60.0	**Yes XX**
Other crops	193	12.95	4.67	0.0	43.76	**Yes XX**
Live cattle etc	11	0.0	0.0	0.0	0.0	No
Other animal prod	63	0.47	0.41	0.0	0.75	No
Wool	11	0.0	0.0	0.0	0.03	No
Beef mutton	83	25.96	25.92	2.1	81.0	**Yes XX**
Poultry etc	211	14.50	14.05	6.6	59.49	**Yes XX**
Vege oils	449	8.47	7.69	0.1	59.04	Yes
Dairy	85	66.75	43.75	26.6	78.05	No
Rice	224	0.0	0.0	0.0	0.0	No
Sugar	13	0.0	0.0	0.0	0.0	No
Other foods	512	13.60	8.16	1.2	34.33	No
Bev tobacco	279	7.01	1.95	0.4	74.76	yes

Source: tralac analysis, where **XX** means that at least 60 percent of the imports are subject to TRQ rates.

Table 10 takes another step and looks at the source of these imports from the EU with TDCA preferences, SADC which are duty-free and the Mercosur sources where there is active FTA interests. The policy space on the right hand side now narrows down considerably as to where there may be space for increasing the duty rates by 25 percentage points as we have done. This space is limited to:

- wheat[12]
- maybe other grains (mostly maize)
- vegetable oils (animal feed).

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[12] We would note that PROVIDE (2005a) examined the implications of higher wheat tariffs in more detail than we are able to do with GTAP and conclusively found that raising the tariffs by 25 points delivered highly concentrated benefits to the wheat industry that were lower than the income loss caused in other sectors.

Table 10: the WTO policy space for South Africa by GTAP sector (final)

	Import	MFN duties and sources by % share				Policy
	$m	MFN%	EU	SADC%	Merc %	Space %
Wheat	181	1.95	14.2	0.0	36.5	Yes
Other grains	36	0.05	12.0	1.1	18.4	Maybe
Vege fruit nuts	78	5.19	10.9	9.0	7.3	No
Oil seeds	20	3.23	0.9	60.4	15.6	No
Plant fibres	67	0.08	0.1	99	0.0	No
Other crops	193	4.67	14.9	26.4	14.3	No
Live cattle etc	11	0.0	40.0	0.5	6.2	No
Other animal prod	63	0.41	19.4	3.5	3.2	No
Wool	11	0.0	2.1	0.0	0.0	No
Beef mutton	83	25.92	1.4	0.0	42.6	No
Poultry etc	211	14.05	12.8	2.1	73.1	No
Vege oils	449	7.69	7.1	1.2	56.6	Yes
Dairy	85	43.75	54.4	0.1	10.7	No
Rice	224	0.0	0.6	0.1	0.2	No
Sugar	13	0.0	3.1	43.9	50.2	No
Other foods	512	8.16	40.0	1.2	12.8	No
Bev tobacco	279	1.95	67.6	1.9	1.0	no

Source: tralac analysis

Thus, while the GTAP simulation shows a modest gain to South Africa and XSC, closer analysis reveals that such a blanket policy is not an option when set against (a) WTO commitments and (b) known and likely FTA commitment. These aspects of the policy space need a more careful analysis, and in addition need to be considered against the balance between imports and exports by GTAP sector. It makes little economic sense to increase tariffs on what are dominantly export sectors for agriculture.

5. The final analysis

This section will examine the main agricultural imports (as defined by the WTO) in a systematic manner. The relevant data is set out in Table 11, and should be read as follows:

- The first column is the short definition of the specific product used.

- The next three columns refer to the global imports, expressed in US dollars and based on the 2005 December year imports. The first of these is the dollar amounts, expressed in $ million; the second is the variability over the last ten years, shown as the average deviation expressed as a percentage of the final year (2005) imports; the third is the average growth rate of this line expressed as the most recent 2005 import values relative to the first 1996 values.

- The next three entries are the tariff rates, with the MFN (current applied) rate first followed by the WTO bound rates and then the EU TDCA preference that will apply at the end of the TDCA implementation period (around 2010 to 2012).

- The next section refers to the WTO quota data. The first column is just a 'yes' where at least part of the product aggregation is subject to a TRQ or blank where it is not. Next are the TRQ in-quota tariff rates, which is 20 percent of the WTO bound rate (note here that some of the TRQ in-quota rates are actually above the current MFN applied rates. In that situation the TRQ has not been enforced). This is followed by an indication of the 'fill' rates, expressed as a ratio where a value greater than 1.0 indicates that the TRQ is more than filled[13].

- The next three columns are concerned with the main import sources, with the EU share shown for all lines, the SADC share where this is significant and the main source for this product sequentially shown.

- Next there are two columns that refer to exports. The first shows the value of 2005 exports (again in $s), while the second expresses exports for 2005 as a ratio of imports. Where this ratio is large (for example, fresh fruit at 50.9) it shows that exports are far more important than imports and raises the question as to why South Africa would wish to protect a sector where it has a clear competitive advantage globally[14].

- Finally there is a yes/no/maybe for possible policy space. The 'no' refers to situations where (a) the bound rates are zero or close to zero or close to the MFN applies rates or (b) where at least 50 percent of the imports are from the EU or SADC and there are no TRQ constraints. The 'yes' refers to situations where there seems to be clear 'space' to raise the applied tariff, although sometimes not by very much. The 'maybe' refers to situations where there is limited room to raise the applied tariff for whatever reason.

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[13] Note that this may be a little misleading for some product groups, as only part of our aggregation may be subject to a TRQ.
[14] For the sectors where this ratio is high, South Africa generally has low applied and bound tariffs, but there are the exceptions of fresh fruit and wine where protection is high.

The two measures of (a) growth and (b) variability can be read together to give an idea of the time-path of the individual import sectors over the last ten years. Growth rates are expressed in log terms as the change in the final year of 2005 divide by the first year of 1996, with this figure divided by the number of observations (ten) to get an average change over the period. Variability uses the standard deviation, but expressed as a percentage of the final year value. Thus, the growth shows the first and last years in perspective, while the variability shows the relative stability of the imports over this period. Overall, there is a negative correlation of -0.21 between variability and growth. This indicates that lower growth has a greater annual variability. Excluding the two outliers of maize and other fibres, the average growth rate is five percent and the variability is 26 percent. In 12 of the 57 sectors the import value in 2005 was below the comparable import value in 1996, although note that the values are expressed in US dollars and not rand. Correlations between the value of imports and variability and the value of imports and growth are both very low and negative (-0.08 for variability and -0.03 for growth), indicating that there is almost no correlation between the absolute value of the imports and the growth over the period or the variability of those imports year-on-year.

Table 11: South Africa's main agricultural imports and the available policy space

Product	Global imports 2005 $m	Variability	Growth	Tariffs MFN	Bound	EU end	Tariff rate quota details TRQ?	Tariff in-quota	Fill ratio	% from EU	SADC	Main Source	Exports $m	Ex/IMP	Policy Space
Rice	230.0	12%	3.6%	0.0%	0.0%	0.0%				1%		ASEAN	6.2	0.0	No
Oth animal prod	46.5	18%	1.6%	0.0%	0.0%	0.0%				16%		China	16.8	0.4	No
Coffee	37.7	20%	-0.2%	0.0%	1.1%	0.0%	Yes	0.2%	1.6	19%	8%	ASEAN	4.1	0.1	No
Nuts	30.8	13%	6.0%	3.0%	3.3%	0.0%				3%	15%	USA	61.6	2.0	No
Wool	16.0	17%	5.3%	0.0%	0.0%	0.0%				27%		USA	108.9	6.8	No
Animals	14.8	17%	6.2%	0.0%	0.0%	0.0%				58%	4%	EU	16.2	1.1	No
Vege fibres	2.4	67%	-6.6%	0.0%	0.1%	0.0%				5%		ROW	0.6	0.2	No
4.2.1 Sub total	378.2	No policy space as applies at bound rates (14.1% of the total)EU													
Cotton	69.0	25%	0.3%	24.4%	59.0%	0.0%	Yes	11.8%	3.6	0%	99%	SADC	26.7	0.4	No
Butter	6.3	52%	-5.0%	78.7%	79.0%	15.4%	Yes	15.8%	2.3	98%		EU	2.1	0.3	No
Beer	5.5	54%	-2.5%	5.0%	8.5%	0.0%				91%	3%	EU	8.1	1.5	No
Proc meats	6.4	26%	8.8%	16.6%	37.0%	0.0%				25%	65%	SADC	17.2	2.7	No
Whey etc	15.2	15%	3.7%	95.3%	95.3%	0.0%	Yes	19.1%	3.3	89%		EU	3.2	0.2	No
Water	27.7	20%	15.3%	1.1%	20.5%	0.0%				87%		EU	36.5	1.3	No
Tea	24.4	11%	6.0%	47.5%	164.8%	0.0%	Yes	33.0%	1.7	2%	82%	SADC	6.8	0.3	No
Wine	12.6	20%	-0.1%	25.0%	73.0%	0.0%	Yes	14.6%	1.1	79%	3%	EU	596.1	47.3	No
Cigarettes	23.1	21%	7.2%	33.5%	54.0%	0.0%				61%	14%	EU	130.9	5.7	No
Flowers etc	7.4	12%	0.7%	4.2%	12.2%	0.0%				60%	13%	EU	59.3	8.0	No
Spirits etc	185.8	16%	5.9%	4.3%	133.0%	0.0%	Yes	26.6%	2.3	69%		EU	148.6	0.8	No
Other fibres	1.1	145%	1.3%	0.0%	2.7%	0.0%				67%		EU	0.0	0.0	No
Cheese	16.7	17%	4.0%	95.0%	96.0%	67.9%	Yes	19.2%	1.9	57%		EU	3.6	0.2	No
Proc foods	129.3	14%	10.2%	15.6%	37.0%	0.0%	Yes	7.4%	12.7	53%		EU	90.1	0.7	No
Vege preps etc	31.0	18%	9.1%	16.3%	35.7%	0.0%				52%		EU	25.7	0.8	No
Vege oils	50.3	17%	1.9%	4.3%	20.7%	0.0%	Yes	4.1%	5.6	24%	27%	SADC	76.9	1.5	No
4.2.2 (a) Sub total	611.8	Over 50% from EU/SADC combined – little policy space (22.9% of the total)													
Animal foods	67.3	34%	-5.5%	8.7%	36.8%	0.0%	Yes	7.4%	17.9		10%	EU	33.4	0.5	Maybe
Baking	55.7	18%	8.8%	23.0%	34.6%	0.0%	Yes	6.9%	3.4		3%	EU	26.3	0.5	Maybe
Eggs etc	2.2	32%	9.2%	12.9%	20.8%	0.0%	Yes	4.2%	0.2		45%	SADC	1.5	0.7	Maybe
Fats, other oils	61.4	16%	-2.6%	7.2%	52.3%	0.0%						EU	16.9	0.3	Maybe
Sugar	12.3	41%	45.7%	0.0%	105.0%	0.0%	Yes	21.0%	0.6		43%	MERC	275.0	22.4	Maybe
Fresh fruit	23.5	15%	7.2%	9.7%	24.0%	0.0%	Yes	4.8%	42.9		6%	ROW	1,197.9	50.9	Maybe
Tobacco	77.7	19%	3.1%	15.0%	44.0%	0.0%	Yes	8.8%	1.5		30%	MERC	36.9	0.5	Maybe
Vege extracts	20.9	10%	2.0%	4.4%	10.6%	0.0%						EU	4.7	0.2	Maybe
Drink flavour	49.5	13%	2.7%	0.3%	8.3%	0.0%						EU	50.2	1.0	Maybe
Margarine	15.0	9%	5.9%	10.0%	37.0%	0.0%						EU	6.9	0.5	Maybe
Milling	21.0	16%	6.3%	11.0%	86.4%	0.1%						EU	140.4	6.7	Maybe
4.2.2 (b) Sub total	406.3	Over 40% but under 50% from EU/SADC combined – a bit more policy space (15.2% of the total)													

Table 11 (continued): South Africa's main agricultural imports and the available policy space.

	Global imports 2005			Tariffs			Tariff rate quota details			% from		Main	Exports		Policy
Product	$m	Variability	Growth	MFN	Bound	EU end	TRQ?	Tariff in-quota	Fill ratio	EU	SADC	Source	$m	Ex/IMP	Space
Casein	111.0	10%	1.4%	2.5%	8.7	0.0%				32%		EU	3.9	0.0	Maybe
Spices	20.2	10%	3.1%	6.4%	9.4	0.0%				8%	11%	ROW	14.6	0.7	Maybe
Cocoa choc	69.6	13%	5.4%	9.0%	10.3	0.0%				38%		EU	30.7	0.4	Maybe
4.2.3 Sub total	200.8	Very limited policy space as applied close to bounds policy space (7.5% of the total)													
Maize	8.0	305%	-21.3%	0.0%	50.0	0.0%	Yes	10.0%	0.3	0%		MERC	257.8	32.1	Input
Palm oil	128.6	17%	5.2%	8.1%	81.0	0.0%				0%		ASEAN	0.6	0.0	Input
Soybean cake	118.7	19%	6.0%	6.6%	33.0	0.0%	Yes	6.6%	4.9	0%		MERC	1.3	0.0	Input
Soybean oil	110.0	29%	21.9%	10.0%	81.0	0.0%	Yes	16.2%	3.6	0%		MERC	0.5	0.0	Input
Sunflower	26.0	94%	-10.7%	10.0%	61.0	0.0%				1%		MERC	14.8	0.6	Input
4.2.4 Sub total	391.4	Policy space, but a major feed input for the agricultural sector (14.6% of the total)													
Wheat	180.6	24%	1.8%	1.9%	70.7	2.0%	Yes	14.1%	11.7	14%		USA	5.8	0.0	Yes ?
4.2.5 Sub total	180.6	Policy space, but a staple food (6.7% of the total)													
Sugar products	69.2	24%	16.3%	17.7%	46.1	0.0%	Yes	9.2%	2.7	19%		MERC	29.5	0.4	Yes
Hides/skins	11.7	48%	1.4%	0.1%	1.4	0.0%				7%	4%	ROW	87.2	7.4	Yes
Fresh milk	1.4	23%	34.0%	0.0%	96.0	0.0%	Yes	19.2%	0.0	37%		MERC	5.5	3.8	Yes
Other meat	20.5	17%	5.2%	5.1%	39.3	5.9	Yes	7.9%	8.9	8%		ROW	14.9	0.7	Yes
Vegetables	43.1	19%	3.4%	10.6%	30.4	1.1	Yes	6.1%	0.7	9%	3%	China	41.4	1.0	Yes
Sheepmeat	20.7	23%	-0.3%	40.0%	66.0	40.0	Yes	13.2%	4.9	0%		ROW	1.7	0.1	Yes
Proc fruits	34.9	17%	5.2%	6.1%	36.0	0.0	Yes	7.2%	3.8	10%		MERC	306.9	8.8	Yes
Powders	27.6	23%	10.3%	75.5%	96.0	75.0	Yes	19.2%	2.8	23%		ROW	10.5	0.4	Yes
Poultry	147.2	19%	11.1%	17.9%	70.8	11.8	Yes	14.2%	7.4	3%		MERC	3.8	0.0	Yes
Pork	47.3	19%	10.6%	15.0%	37.0	5.5	Yes	7.4%	1.0	33%		MERC	2.2	0.0	Yes
Other grains	9.9	25%	6.3%	0.2%	26.2	0.0	Yes	5.2%	1.8	1%	3%	ROW	2.4	0.2	Yes
Malt	23.9	24%	-5.9%	0.0%	33.0	0.0				30%		ROW	0.3	0.0	Yes
Beef	31.9	36%	-1.4%	40.0%	69.0	15.0	Yes	13.8%	0.8	0%		MERC	11.7	0.4	Yes
Barley	18.6	38%	108.9%	0.0%	41.0	0.0	Yes	8.2%	7.5	22%		ROW	0.0	0.0	Yes
4.2.6 Sub total	507.5	Yes, there is policy space in these sectors (19.0% of the total)													

Source: tralac calculations

5.1 The results for policy space

To assist in this analysis we have selected the different categories of

(a)   no policy space, as either (i) the applied rates are at or very close to the WTO bound rates or (ii) the combined percentage market share from the preferential sources of the EU and SADC is at least 40 percent;

(b)   maybe there is some limited space, but the current applied rates are within a maximum of 6.4 percentage points of the bound rates;

(c)   where there is room to increase the applied rates but these imports are an essential feedstuff for the animal or poultry industries in South Africa;

(d)   where there is room to increase the applied rates but this product is a basic food in South Africa and other analyses have shown that increasing tariffs hurts the poor and generates a welfare loss to South Africa (wheat); and

(e)   the final category where the applied tariffs can be raised as there is clear policy space here.

Each of these will be discussed in turn. However, before undertaking this discussion there is a need to elaborate on the WTO TRQ situation that was outlined earlier in Section 2.1. Table 11 contains a column ('fill ratio') that shows the imports by volume expressed as a ratio of the TRQ volume in each of the relevant sectors where the TRQ applies (i.e. where the ratio is greater than 1.0 the volumes of imports in aggregate are greater than the quota volumes). This TRQ information may be a little misleading in that the product groups are aggregated in several instances and the TRQ fill ratio may in fact apply to only a minority part of the product. For our illustrative purposes it is a useful guide. There are several points of interest here that relate to TRQs:

1.   where the MFN applied rate is actually below the in-quota tariff rates for the TRQ. In these instances the TRQ is, in effect, currently a meaningless concept, as the MFN rate will also, by definition, be below the out-of-quota rate (recall that the TRQ in-quota rate is 20 percent of the bound rate and the out-of-quota rate is the applied rate). Examples include coffee, soybean cakes and soybean oil, and wheat;

2.   in addition to the above, there are several instances where the TDCA preferential rate is **below** the in-quota TRQ rate (or soon will be as Table 11 shows the TDCA rates that will apply at the end of the TDCA implementation period as 'EU end'). There may be some instances where the TDCA rates shown are in a downwards 'transitional phase' that is masked in the table, although this is not likely to be significant.

3. The treatment of TRQ limits as they apply to the preferential imports from the EU and SADC needs to considered. The TDCA with the EU was concluded post-UR, so therefore these quotas cannot be incorporated into South Africa's WTO commitments. Only cheese and wine are subject to TDCA quota. Under the SADC trade protocol all RSA tariffs have been reduced to zero with no TRQs. The only exception to this is sugar, as sugar imports are regulated by a special sugar protocol with certain quantities and growth factors having been agreed upon. Therefore, there is a need to undertake a 'second round' analysis of the quotas on cheese, wine and sugar to examine this particular aspect of the trade.

There is also the significant point that while there may be several product groups where there does appear to be policy space to increase tariffs, but if WTO TRQs are active in these product groups the situation becomes complex. No increase in the in-quota tariff rate is possible without increasing the bound tariff rates, and this requires negotiation through the WTO. These in-quota rates can only be a maximum of 20 percent of the bound rates, and are not linked at all to the applied rates. Therefore, policy space may well be even more constrained in that access under the TRQ is guaranteed to importers up to the level of the quota volume. The current situation is shown where the quota fill ratio gives an indication of this, but it must also be kept in mind that the situation re the TDCA and SADC imports also needs to be factored in.

5.2 The policy space discussion (from Table 12)

Before commencing this section we will again emphasise our objective of examining available 'policy space' as defined as the ability to increase import tariffs has been adhered to in this paper. There are several secondary issues such as domestic supports and export subsidy constraints and policy space within the WTO framework that could be considered, and we appreciate that there are (often severe) supply constraints facing the South African agricultural sector. A glimpse of the latter is given through the GTAP analysis, as the concept of comparative advantage is embodied within the framework and database of that model, but the aggregation generalisations preclude a specific sector analysis to the detailed level discussed below. However, more on these issues and some additional comments on the welfare implications of changing import tariffs on selected agricultural products are provided in Annex A.

5.2.1   No policy space

This section of the imports contains two sub-groups that in total comprised some 52.1 percent (over half) of the agricultural imports by value during 2005. These two groups are (a: Section 6.2.1) where the applied rates are at (or very close to) the bound rates (14.1% of the imports), or (b: Section 5.2.2) where the combined market share of preferential imports from the EU and SADC is at least 40 percent of the total (another 38.0% to give the 52.1% total). This 40 percent share cut-off for (b) is arbitrary, as there are several products with imports of $406 million (15.2% of total imports) where the combined EU/SADC share is above 40 percent but below 50 percent. These products may alternatively be classified as 'probably no policy space' and would need further examination and possibly some value judgments (although we note that around half of these 40 to 50% EU/SADC share by value are actually in products that are subject to TRQs).

- Five of the tariffs in these products are bound at zero (or an aggregated 0.1% in the case of vegetable fibre imports). This group includes rice, 'other animal products' and live animals.
- The next category is coffee and nuts, where the bound rates are between 1.1 and 3.3 percent and the applied rates are zero and 3.0 percent respectively.

5.2.2   Policy space restricted by EU and SACU domination of imports

As discussed above, this category contains some 38 percent of the imports if a combined 40 percent of the imports from the EU and SADC combined is used as the selection criteria. In all but two of these 27 products (tobacco, Mercosur and fresh fruit, Rest of the World) either the EU or SADC is the main source and in some instances almost the only supplier! Many (15) of the products are subject to WTO TRQs, and in many cases the TRQs are over-filled. In two of the 15 instances the TRQ in-quota rate is above the MFN applied rate, and only in the case of butter and cheese imports will the EU face a positive tariff rate at 2010-12. Note that all three of the TDCA/SADC products of wine, cheese and sugar that face quotas outside of the WTO TRQs are in this category.

A good example of the futility of increasing applied tariffs is the example of tea. Here the applied rate is 47.5 percent while the bound is 164.8 percent, thus the applied could be increased by over 100 percentage points. However, (a) tea is subject to TRQs with an in-quota rate of 33 percent (20% of the bound), and (b) some 82 percent of the imports are coming from SADC with no duties and no quantity restrictions! Similarly, cotton has 'policy

space' in theory to raise the tariffs from 24.4 to 59.0 percent, but as (a) the WTO in-quota tariff is 11.8 percent and that cannot be raised and (b), more crucially, some 99 percent of the imports are from SADC with again no duties and no quantity restrictions this is a hypothetical option only. We would also note that wine, sugar and fresh fruits are major export products where exports are 47, 22 and 51 times the value of imports respectively. It makes little economic sense to protect sectors that are as export-oriented as these three are.

On an MFN basis, there are seven examples in this section where there would theoretically be 'space' to raise the applied rates by at least 30 percentage points. Five of these are subject to TRQs, with one of these the complex sugar imports with their export focus while the other is the export-oriented wine sector. The remaining two are the residual 'fats and other oils' smaller aggregation from HS 15 and another residual aggregation of milling products. In these two cases the combined EU/SADC share is 46 percent for the fats and oils and 40 percent for the milling products, thus suggesting that there may be some limited space here for tariff adjustments.

5.2.3   Yes, but very limited space.

We have included three lines in this section for a total of $200.8 million or 7.5 percent of the imports. These are casein, cocoa and chocolate, and spices, and by value at $111 million casein dominates the imports. The actual space is:

- For casein, applied rates are 2.5 percent and bounds are 8.7 percent, giving 'space' of 6.1 percent;
- For other cocoa and chocolate, applied rates are 9.0 percent and bounds are 10.3 percent, giving 'space' of only 1.3 percent; while
- For spices, applied rates are 6.4 percent and bounds are 9.4 percent, giving 'space' of 3.0 percent.

There are no TRQs here, but for casein (32%) and cocoa and chocolate (38%) the EU is a major supplier. Overall, we would conclude that although the applied rates could be increased marginally except for casein to the bounds, there would appear to be very limited effects of this given the relatively low increases possible.

5.2.4   Yes, but a major input into RSA's agricultural production

Here we have the five lines of palm oil (ASEAN: South-East Asian Nations), soybean cake, soybean oil, sunflowers and maize (all from Mercosur) where total imports of $391.4 million constitute some 14.6 percent of South African agricultural imports. The actual space is:

- For palm oil, applied rates are 8.1 percent and bounds are 65.8 percent, giving 'space' of 57.7 percent;

- For soybean cake, applied rates are 6.6 percent and bounds are 37.0 percent, giving 'space' of 30.4 percent;

- For soybean oil, applied rates are 10.0 percent and bounds are 81.0 percent, giving 'space' of 71.0 percent;

- For sunflowers, applied rates are 10.0 percent and bounds are 61.0 percent, giving 'space' of 51.0 percent; and

- For maize (predominantly and export crop) applied rates are zero and bounds rates of 50.0 percent, giving 'space' of 50.0 percent.

Both of the soybean products are in theory covered by TRQs, with fill rates of 4.9 for the soybean cake and 3.6 for the soybean oil, while the maize TRQ is under-filled even at duty-free entry. Currently, the applied MFN rates are at, or actually below, the in-quota rate for the three products, therefore rendering the quota meaningless.

The salient point here that there are virtually no imports from either the EU or SADC. So the question is whether the tariffs should be increased to the bound rates that around one-quarter of the imports of the soybean products would come in at in-quota rates that do not increase on soybean cake but increase by a more important 6.2 percentage points on the soybean oil. While these may be manageable, the consequential (a) significant reduction in imports or (b) the increased duties for the newly applied **out-of-quota** tariffs to 33 and 81 percent respectively for the two products would impose a considerable cost-excess on South African poultry and animal feedlot farmers.

A separate study is needed to assess the overall cost of this particular situation.

5.2.5   Yes, but is this a good idea?

The single entry in this section is the imports of wheat, where they totalled $180.6 million during 2005. Some 14 percent of this was from the EU, where the preferential rate of 2.0 percent is the same as the current MFN rate but significantly below the bound rate of

70.7 percent. To confirm that while policy space is not a good idea we would refer the reader to PROVIDE (2005) who analysed the welfare implications of such a move. Here they traced the effects right through from farmers to players such as millers and bakers to the final implications on all 162 households in South Africa. The results showed that only seven of these 162 households were better off (five wheat growers in the Northern Cape and two in the Free State), while all others and the South African economy suffered (slightly) as final bread and bakery product prices increased. This research was used to justify a reduction in wheat tariffs rather than the hoped-for (by wheat farmers) increase. Unpublished simulation results that symmetrically decreased rather than increased tariffs showed enhanced welfare gains for both the economy and an overwhelming percentage of the general population as represented by the 155 households out of 162 who gained.

This is a similar argument as made above against using the policy space for agricultural inputs, and we feel that even more of our sectors may well fit into this or the above category. However, the objective of this paper is to assess the available policy space, so we have assed that this space indeed exists but warned of other considerations.

5.2.6   Yes, there appears to be policy space!

This section includes 14 products for a total import value of $5,007.5 million or 19.0 percent of the imports. The biggest line here is poultry ($147.2m), followed by sugar products ($69.2m) and pork ($47.3m). Around one-third of the imports of fresh milk and malt are sourced from the EU, suggesting some limits to the policy space[15]. Also, 12 of the 14 products are covered by TRQs, thus again raising the flag of caution to look more closely at the actual versus perceived policy space. One of these TRQ sectors is poultry meat, where the applied MFN rate is 17.9 percent against the bound of 70.8 percent and the TRQ rate is 14.2 percent. The TRQ is over-filled at a ratio of 7.4, suggesting that most of the imports are coming in at an MFN rate of 17.9 percent rather that the TRQ rate of 14.2 percent. For both vegetables and beef the TRQ fill ratio is 0.7 and 0.8 percent respectively, suggesting that there may well be room to actually increase imports through the 'untouchable' bound rates regardless of any move to raise the MFN and therefore out-of-quota tariff rates.

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[15] The senior author would like to point out that imports of milk powders, sheep meat and beef are some $79.6 million, and having come from New Zealand where fighting the good fight against protectionism of these products globally is a way of life it grieves one to be including these products here.

6.   Other consideration

To date we have not examined the possible limits to policy space that the proposed FTA between SACU and Mercosur may have on this overall policy space. It is our understanding that while negotiations have more or less been concluded there has not been an official signing and therefore implementation of the agreement[16]. Preferences that have been offered by South Africa/SACU are on the basis of a percentage reduction from the applied rates, with these preferences in four bands of 100 percent (i.e. duty free), 75 percent, 50 percent and 25 percent. This seems to mean that there are no binding obligations other than to maintain this margin of preference, and that the 'policy space' then becomes a function of the difference between applied and bounds and the preference factor. Mapping the import data against the proposed agreement suggests that the only significant preferences that apply to imports from Mercosur are (with 2005 imports in parentheses):

1.   100 percent preferences are offered for some lines of nuts ($3.87m); buckwheat ($0.26m); extracts of tea or coffee ($2.26m); and preparations used in animal feed ($5.94m).
2.   25 percent preferences are offered on some of the important imports of pork ($12.88m from the total of $30.99m) but more importantly on the imports of soybean oilcake ($118.71m).

There are also some quotas that have been placed on the importations from the EU under the TDCA, but an examination of the TDAC agreement shows that these apply only to imports of cheese and wine.

Finally, the SADC sugar protocol acts to place limitations upon the importation (and exportation) of sugar. This is the only quantitative constraint facing SADC countries into South Africa.

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[16] Similarly, the agreement between SACU and EFTA has been concluded,

7.   Summary

The general Table 12 contains a summary of the policy space available to South African agriculture. In general, it is limited. Some 14.1 percent of the imports are 'locked' by the WTO bound rates, with an additional 7.5 percent almost at those bound rates. Another 22.9 percent is effectively 'locked' with at least 50 percent sourced from the EU/SADC combined with an additional 15.2 percent 'almost locked' with at least 40 percent of the imports from these same destinations. This gives a total of 59.7 percent that is, for all practical purposes, locked into the current tariff policy regime.

Of the remaining imports, another 14.6 percent we have classified as animal feed inputs, thereby raising the caution flag that increasing these tariffs will directly pass a cost increase on to South African poultry and meat producers. We have also isolated the imports of wheat (6.7% of the total) and argued that while there is policy space to increase these tariff rates we consider that they are staple foodstuffs and provide supporting analysis that shows increasing these tariffs is welfare reducing for South Africa. This leaves a grand total of 19.0 percent of all imports where we see at least some policy space, but caution that the majority of these imports are subject to WTO TRQ obligations and thus not totally under the control of South African trade policy authorities (and we add that South Africa does not have a trade policy per se and must liaise with its fellow SAC members on this and agricultural policy).

Table 12: Summary of the policy space available

No policy space, as applied rates are at bounds ($378.2m, 14.1% of total imports)					
Rice	$230.0m	Oth animal prod	$46.5m	Coffee	$37.7m
Very limited space, as EU/SADC imports combined > 50% ($611.8m, 22.9% total)					
Spirits etc	$185.8m	Processed food	$129.3m	Cotton	$69.0m
Limited space, as EU/SADC imports still > 40% ($406.3m, 15.2% total)					
Tobacco	$77.7m	Animal feeds	$67.3m	Fats/oils	$61.4m
Very limited space, as applied rates are close to bounds ($200.8m, 7.5% total)					
Casein	$111.0m	Cocoa/choc	$69.6m	Spices	$20.2m
Policy space, but a major animal feedstuff ($391.4m, 14.6% total)					
Palm oil	$128.6m	Soybean cake	$118.7m	Soybean oil	$110.0m
Policy space but a staple food ($180.6m, 6.7% total)					
Wheat	$180.6m				
Yes, there is clear policy space ($507.5m, 19.0% total)					
Poultry	$147.2m	Sugar products	$69.2m	Pork	$47.3m

Source: tralac calculations

Annex A: Comments on selected agricultural products/sectors

While the objective of this paper has been to analyse the available policy space for the South African agricultural sector, we have introduced some comments into the text on the desirability of doing so. This includes the category of the agricultural inputs of largely feed products of oilseeds and the special category of wheat where we point to more detailed analysis that shows a welfare enhancement from reducing and not increasing protection through cheaper food prices. The objective of this section is to make some observation of some of the key sectors to place the policy space in perspective.

i)   Meats

A recent study by Oyewumi (2005) measured the impacts of tariffs and tariff rate quotas liberalisation on the meat sector in South Africa using a partial spatial equilibrium model developed for that purpose.

The different scenarios examined in this study include:

- Scenario 1: A 33% expansion of quota.
- Scenario 2: A 33% decrease in MFN ad valorem tariff.
- Scenario 3: A scenario combining the two reforms described above.
- Scenario 4: Full liberalisation scenario with all tariffs set to zero.

Given the complexities of the TRQs in the meat sector, there is no one-for-one mapping that is directly applicable to the 'policy space' examination that we are undertaking in the main body of the text. However, Scenario 3 above may come close if we assume that at the margin the results for moving the other way and **reducing the TRQ and increasing the MFN tariff** would be a mirror image of Oyewumi's results. The results from Scenario 3 are (where we have changed the direction of the results as bolded to reflect the mirror approach):

Beef: Total beef supply in South Africa will **increase** by 2.3%, while demand will **decrease** by 6.93%. Beef prices will on average **increase** by 8.04%.

Live cattle: Total cattle supply and demand in South Africa will **increase** by 1.75% and 1.90%, respectively. Cattle prices will on average **increase** by 5.52%.

Sheep-meat: Total sheep-meat supply in South Africa will **increase** by 1.60%, while demand will **decrease** by 6.49%. Sheep-meat prices will on average **increase** by 7.72%.

Live sheep: Total sheep supply and demand in South Africa will **increase** by 1.41% and 1.45% respectively. Sheep prices will on average **increase** by 3.31%.

Pork: Total pork supply in South Africa will **increase** by 3.02%, while demand will **decrease** by 8.48%. Pork prices will on average **increase** by 7.30%.

Live pigs: Total pig supply and demand in South Africa will **increase** by 2.57% and 2.57%, respectively. Pig prices will on average increase by 6.68%.

Poultry: Total poultry supply in South Africa will **increase** by 3.06%, while demand will **fall** by 23.45%. Poultry prices will on average **increase** by 11.33%.

The study used the consumer and producers surplus concepts, as well as the equivalent variation concept to measure the impact on welfare of potential trade policy changes mentioned. The consumer and producer surplus measures revealed, as *a priori* expected, that a more liberalised trade regime for meat will result in net welfare benefits for South Africa. Scenario 3 will result in a welfare **loss** (again, the direction of the result changed to reflect our mirror) to consumers amounting to R753.6 million, while the total **gain** to producers will be R277.9 million for an overall loss of around R475 million. The welfare loss to consumers amounts to a 0.13% **decrease** in real gross national income or 0.20% **decrease** in real disposable income. Welfare **gains** by producers translate into a **gain** of 0.87% in real gross farm income or 3.4% in real net farm income.

In the final analysis we have assumed that the Oyewumi's result will be symmetrical, and it is therefore logical to expect that based on the current tariff regime in the meat sector in South Africa, an increase of protection will yield increasing benefits to producers but a loss in consumers' welfare. Thus, increasing protection results in a welfare loss to South Africa even though there is a wide policy space available for such step. Cognisance should, however, be taken of the ratio of producers' gains and real gross farm income as well as the ratio of consumers' loss and real disposable income.

ii) Sugar

Sugar is basic foodstuff for many countries but not necessarily a dietary staple food, although its contribution to employment is large. In assessing the implications of increasing protectionism for the South African sugar sector, a number of issues need to be taken into consideration. Globally, sugar enjoys the political support of many governments, and particularly so through protection of the higher-cost beet industry in many of the richer countries. Therefore the world prices of sugar are very distorted, and suppressed by perhaps

40 percent for efficient sugar cane exporters (Mitchell, 2004). This blocks the realisation of comparative advantage for efficient sugar-producing countries.

During 2005 the world sugar cane production was 1,285.4 million tonnes produced in more than 90 countries, with Brazil emerging as the world leader. Africa's contribution stood at 91.7 million tonnes, or some 7.1 percent of the global total. South Africa (ranking number 12 globally) produced about 21,7 million tonnes, some 1.7 percent of world production and 24 percent of Africa's production. The other African country that made it into the top 20 was Egypt, standing at number 15, although more than 17 countries produce sugar cane in Africa.

In South Africa, the sugar industry is vital for providing direct employment (sugar cane production and processing) and indirect employment on industries related or interdependent on sugar (chemicals, fertilisers, etc.). Another important feature of the sugar industry in South Africa is its success rate of land reform beneficiaries or inclusion of small scale farmers into the mainstream. The brief comments below show below some indicative comments of the implications of liberalising world sugar trade and production for South Africa.

Sandrey and Jensen (2007) use the GTAP model to indicate that if South Africa, Brazil and India open up their sugar markets **to each other**, for South Africa production will decrease (0.8%), exports will decrease (3.9%) and imports will also decrease (0.6%), but output prices will increase (0.8%). PROVIDE (2004) gives an insight of the likely impact for South Africa following liberalisation of the global sugar industry. The analysis examined the twin effects of increasing world prices of sugar by 50 percent and then improving South African processing efficiency by 10 percent. The results concluded that the outcomes of sugar liberalisation for South Africa are not definitely positive, but the expectations were that changes will be positive and visible in the sugar cane producing areas with increases in GDP of 0.03 percent and 0.078 percent with liberalisation of trade (with technical change and without technical changes respectively). Thus, just increasing global sugar prices needs to be accompanied by increased efficiency in the processing sector for South Africa to benefit. In terms of factor income welfare effect it came out clearly that gains are distributed more heavily towards low income groups.

iii)   Summer cereals (maize)

Maize constitutes about 80 percent of the production of summer cereals. There are two classifications of maize: one, (white maize) is a staple dietary food staff to the black

population groups in South Africa, and two, (yellow maize) is an important feed input into the livestock industry. As indicated above, yellow maize is an export-oriented crop although it is also used domestically.

PROVIDE (2005b) examines changing (by both increasing and decreasing) the import tariff rate for these crops. As South Africa is a net exporter, these changes in import tariff (increase or decrease) on summer cereals only marginally influence the domestic prices. For a 15 percentage point increase in the import tariff rate, the increase in the domestically marketed and producer prices is 1.27 and 0.78 percent respectively. The economy-wide effect of tariff changes will be low although the economy does experience a small net loss in value-added of R31.9 million.

iv)   Wheat

South Africa imports a substantial amount of wheat, and this product has been briefly discussed earlier in the paper. In response to low world wheat prices and the appreciating exchange rate regime, wheat farmers went to Government suggesting possible protection in the form of import tariffs. Again, PROVIDE (2005a) used a general equilibrium analysis to show that tariff is not a welfare enhancing solution, as the consumers would suffer from higher prices to a greater extent than producers would gain. These results have been used in our study to justify our observation that while there is considerable policy space to increase import tariff it is not in the overall interests of South Africa to do so.

v)   Cotton

The issue here is not about the policy space to increase tariffs, as that space is precisely zero due to the fact that almost all of the imports during 2005 of $67.4 million are sourced from the SADC countries. The top four sources of Zambia ($32.8m), Zimbabwe ($27.2m), Malawi ($6.1m) and Mozambique ($0.74m) contributed some 99.21 percent of the total, and when you include Tanzania's contribution the share moves to 99.55 percent. These imports are, of course, both duty- and quota-free, whereas there is a TRQ for cotton from other sources that face a duty of 35 percent that can potentially be raised to 60 percent.

Within SADC, Tanzania had overtaken Mozambique as the largest producer of cotton by the late 1960s. However, the share of these two countries combined declined from about 65 percent of total output in 1961 to less than 45 percent by 2004. The share of the 'landlocked

central' countries increased the most during the 1980s and 1990s, and peaked at the turn of the millennium. Zimbabwe's production has declined quite rapidly since then.

One issue that has arisen is that there may be a degree of arbitrage taking place in that cotton is being sourced from other countries and then transhipped through SADC in order to circumvent the 26 percent MFN tariff that would otherwise apply. Given the well-known transportation problems and associated high costs of moving goods in these SADC countries it seems extremely unlikely that they would finally come to rest in South Africa after firstly transiting through the Republic before being re-exported back. Indeed, Zambian trade data reports no imports of cotton at all during 2004.

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